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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/600,400	01/02/2001	Rainer Buhler	4421-003	4845

7590 05/23/2003

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EXAMINER

CRANE, DANIEL C

ART UNIT	PAPER NUMBER
3725	13

DATE MAILED: 05/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	09/600,400	BUHLER ET AL.	
	Examiner	Art Unit	
	Daniel C Crane	3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 16 April 2003.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 28-44 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 28-44 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s). _____ .
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application (PTO-152)
 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ . 6) Other: _____ .

REJECTION OF CLAIMS ON FORMAL MATTERS

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 28-44 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The original disclosure is silent as to the limitation that there is “means for providing for a uniform forging pressure of any diameter of workpiece during forging” and a step of “upsetting the projecting part with a uniform forging pressure regardless of the diameter of the workpiece”. Accordingly, the claims contain new matter as being unsupported by the original disclosure.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 31-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As to claim 31, it is unclear what constitutes “pates”.

REJECTION OF CLAIMS OVER PRIOR ART

Claims 41 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Alain (2,653,809). See Figures 1 and 4 where the dies 7 and 8 are provided with an enlarged die part having a substantially U-shaped groove where the metal can flow during the forging operation. The forging tool is shown at 6. Since the die has an identical shape as that shown by applicants, the dies 7 and 8 have means to alleviate stress to the workpiece during cold forging. Accordingly, the upsetting results in the forming of the workpiece by alleviating the stress within the workpiece during the forging operation.

Claims 28, 39, 40 are 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alain (2,653,809) in view of Brenner (2,100,939) and Wilson (3,218,837). Alain illustrates in Figures 1 and 4 two opposed dies 7 and 8, each having a first die part and a second die part with the second die part having a cavity 10 and sufficient to allow the workpiece to project therefrom so that the workpiece can be upset into the cavity 10 by the forging means 6. Since the cavity is of a substantially U-shape, similar to applicants', the shape of the cavity will inherently alleviate stress within the workpiece. Alain does not show that the device includes an "adjusting means" for adjusting the distance that the workpiece can project therefrom. Such an adjusting device is shown by either one of Brenner at 6 or Wilson at 90. It would have been obvious to the skilled artisan at the time of the invention to have modified Alain's upsetting device by further providing an adjusting means as shown by either one of the secondary teachings so as to limit the position of the workpiece within the cavity of the two opposed dies.

Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Alain (2,753,809) in view of Camping (5,799,528). Alain illustrates the claimed invention as noted *supra*. Alain does not show that the forging dies 7 and 8 have a “relief channel”. However, such is known as shown by Camping at 39 so as to positively grip the elongated workpiece where the workpiece is provided with ribs which cooperate with the relief channels of the grippers. It would have been obvious to the skilled artisan at the time of the invention to have modified Alain’s forging dies by using the concepts shown by Camping by further providing the dies with relief channels as taught by Camping so as to effectively cooperate the ribbed workpiece.

RESPONSE TO APPLICANTS’ COMMENTS

Applicants take issue with the applicability of the Camping teachings against the claims. In this case the claim at issue would be claim 42. It is not the examiner’s position to bodily incorporate the features of Camping within the Alain teaching. It is merely the concepts taught by Camping which are relied upon where the Camping’s grippers or dies 38 are provided with recesses or “relief channels” that can cooperate with ribs on the workpiece. Accordingly, this provision of shaping the dies to the shape of the workpiece so as to not damage with the workpiece when gripped is what is relied upon. Clearly, the skilled artisan familiar with this provision would have been disposed to similarly provide “relief channels” to the dies 7 and 8 of Alain’s cold forging device so as to allow for gripping of the workpiece where the workpiece is provided with ribs.

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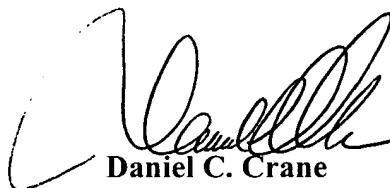
INQUIRIES

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner D. Crane whose telephone number is **(703) 308-1870**. The examiner's office hours are 6:30AM-5:00PM, Tuesday through Friday. The examiner's supervisor, Mr. Allen Ostrager, can be reached at **(703) 308-3136**.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is **(703) 308-1148**.

Documents related to the instant application may be submitted directly to Group 3700 by facsimile transmission at all times. Applicant(s) is(are) reminded to clearly mark any transmission as "DRAFT" if it is not to be considered as an official response. The Group 3725 Facsimile Center number is **(703) 305-3579**.

DCCrane
May 20, 2003



Daniel C. Crane
Primary Patent Examiner
Group Art Unit 3725

Attachment for PTO-948 (Rev. 03/01, or earlier)

6/18/01

The below text replaces the pre-printed text under the heading, "Information on How to Effect Drawing Changes," on the back of the PTO-948 (Rev. 03/01, or earlier) form.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTO-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the Notice of Allowability. Extensions of time may **NOT** be obtained under the provisions of 37 CFR 1.136(a) or (b) for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

2. Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit the drawing corrections within the time period set in the attached Office communication. See 37 CFR 1.85(a).

Failure to take corrective action within the set period will result in **ABANDONMENT** of the application.